

Introduction

This report is the Department of Natural Resources and Environmental Control's environmental profile of the Delaware Bay and Estuary drainage basin in Delaware. It provides a summary of environmental information and highlights some of the treasures and challenges of the Delaware Bay and Estuary. This information is being used by the Department to establish priorities and to educate the citizens of Delaware and other governmental agencies about significant issues of concern in the basin.

The basis for developing this report comes from the Department's understanding that virtually every activity that takes place in the environment impacts multiple resources. For example, improper disposal of hazardous substances or excessive application of fertilizers on land can result in the leaching of these pollutants into ground water. Pollutants like these may also enter streams and other surface waters during storms. The consequences can be widespread, with potential impacts to public drinking-water supplies, habitat, aquatic life, and recreational fishing.

Managing the complex and dynamic natural world we call "the environment" requires examination of the many resources that compose it. Understanding and respecting the relationships that exist in nature between the air, land, water, and living resources has prompted the Department to focus on looking at the environment in an integrated fashion. This effort, which we refer to as "Whole Basin Management," involves monitoring, assessing, and managing all of Delaware's biological, chemical and physical environments on the basis of water drainage patterns.

Delaware has four major drainage basins: the Piedmont, Chesapeake Bay, Inland Bays/Atlantic Ocean, and Delaware Bay and Estuary. Each basin consists of smaller management units called *watersheds*, which represent the area drained by a river, stream, or creek. Delaware has 45 watersheds, 16 of which make up the Delaware Bay and Estuary Basin.

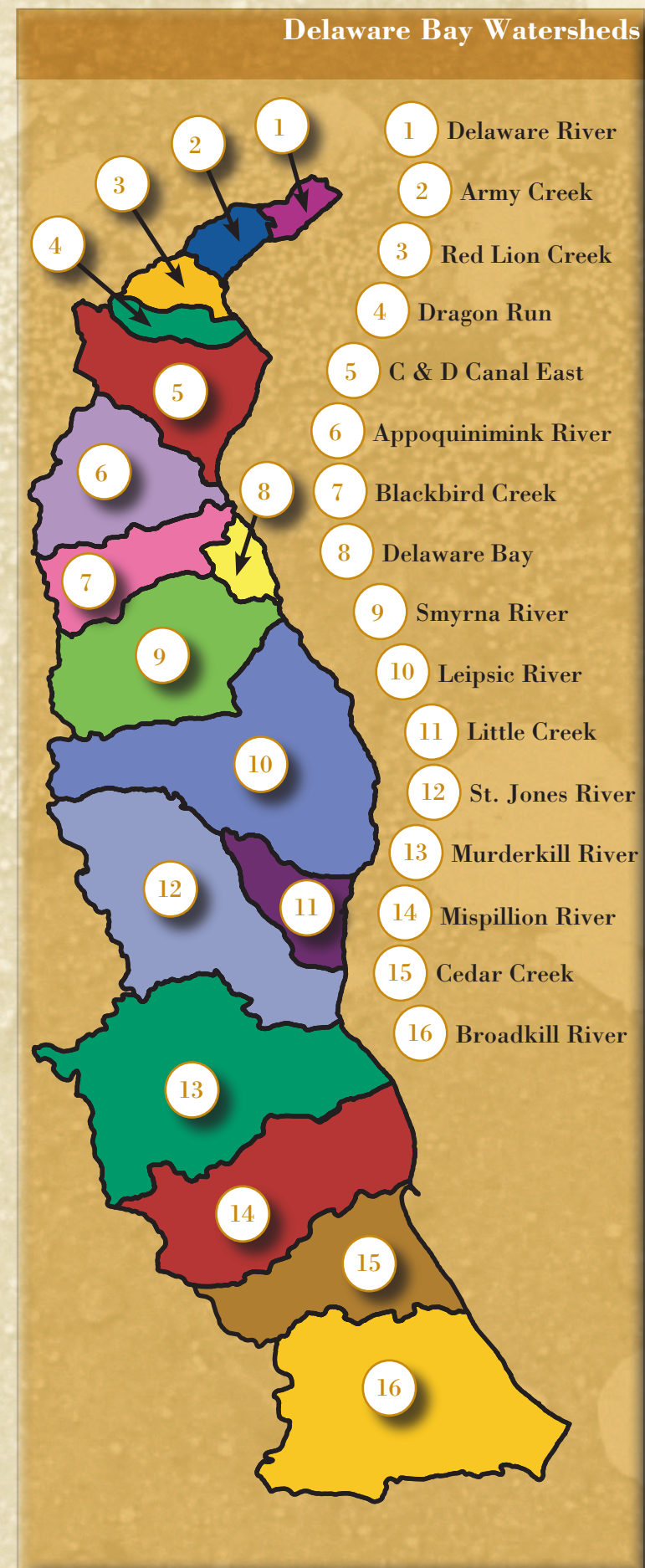
Delaware's four major drainage basins are highlighted below.



Shown at right are the 16 sub-basins that make up the Delaware Bay and Estuary Basin.

The Delaware Bay and Estuary Basin is located in eastern New Castle, Kent, and Sussex counties and is the largest of the four basins. The basin is named for the water bodies into which it drains – the Delaware Bay and the Delaware Estuary. The basin encompasses approximately 520,960 acres, or 814 square miles.

The Delaware Bay and Estuary Basin is the fourth basin being assessed by the Department's Whole Basin Management Program. The primary objectives are to protect the environment, improve community outreach, maximize resource use, and promote environmental education and stewardship. As part of this process, we will be asking you and your neighbors to express your ideas, concerns, and opinions about the watershed in which you reside.



This publication is a summary of the Delaware Bay and Estuary Assessment Report. The pages that follow contain information on the following topics:

- ◆ Watershed Hydrology
- ◆ Water Quality and Quantity
- ◆ Contaminant Sources
- ◆ Land Use and Comprehensive Planning
- ◆ Coastal Zone
- ◆ Living Resources
- ◆ Recreation
- ◆ Efforts Under Way
- ◆ What We Can Do
- ◆ Additional Actions
- ◆ Impaired Waters

As you read this document you are encouraged to think about the problems or issues that concern you in your watershed and the actions we can take together to protect and improve our environment. You'll find some suggestions for what we can all do to help the environment in the last section of this document.

Let's continue to be responsible stewards of the environment and create an environmental legacy that we can be proud to pass on to future generations. We must remember that we are simply borrowing the natural treasures of the Delaware Bay and Estuary from our children. Our goal is to leave them with the same treasures our ancestors left us to experience and enjoy in the bay and estuary!

For more information about the Department of Natural Resources and Environmental Control's Whole Basin Management approach, please contact:

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Delaware's Good Nature Depends on You!